STATE OF SOUTH CAROLINA (Caption of Case) In re: Application of Chem-Nuclear Systems, LLC, for Adjustment in Levels of Allowable Costs and for Identification of Allowable Costs (FY 2007-2008)			DISHES DISHES BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA COVER SHEET DOCKET NUMBER: 2000 - 366 - A			
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Robert T. Bockman

March 3, 2009

Hand Delivered

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Mr. Charles L. A. Terreni Chief Clerk/Administrator South Carolina Public Service Commission Post Office Box 11649 Columbia, South Carolina 29211

Re:

Application of Chem-Nuclear Systems, LLC

(SCPSC Docket No. 2000-366-A) (2008-2009 Proceeding)

Dear Mr. Terreni:

Enclosed herewith for filing with the Commission, please find twenty-five (25) copies of the prefiled Direct Testimony of James W. Latham on behalf of Chem-Nuclear Systems, L.L.C., which testimony is filed pursuant to the Commission's notice dated December 9, 2008 in the above-captioned docket. By Certificate of Service and copy of this letter, I am serving a copy on counsel and parties.

Should you have any questions with respect to this testimony, please do not hesitate to contact me.

Very truly yours,

Robert T. Bockman

Enclosures

cc: The Honorable Henry Dargan McMaster (w/encl.)
The Honorable C. Earl Hunter (w/encl.)
Frank R. Ellerbe, III, Esquire (w/encl.)
Derrick K. McFarland (w/encl.)
Jeffery M. Nelson, Esquire (w/encl.)
Mr. Dan F. Arnett

McNair Law Firm, P. A The Tower at 1301 Gervais 1301 Gervais Street 11th Floor Columbia, SC 29201

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BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

Docket No. 2000-366-A

In re:	Application of Chem-Nuclear Systems,) LLC, a Subsidiary of Energy Solutions for)	
	Adjustment in the Levels of Allowable) Costs and for Identification of Allowable)	CERTIFICATI
	Costs (FY 2008-2009 Proceeding)	OF SERVICE
)	

I, ElizaBeth A. Blitch, do hereby certify that I have this date served one (1) copy of the Direct Testimony of James W. Latham on behalf of Chem-Nuclear Systems, L.L.C. upon the following parties of record by causing said copies to be deposited with the United States Postal Service, first class postage prepaid and properly affixed thereto, and addressed as follows:

The Honorable Henry Dargan McMaster Attorney General State of South Carolina Post Office Box 11549 Columbia, South Carolina 29211

The Honorable C. Earl Hunter Commissioner SCDHEC 2600 Bull Street Columbia, South Carolina 29201

Frank R. Ellerbe, III, Esquire Robinson McFadden & Moore, PPC Post Office Box 944 Columbia, South Carolina 29202 Derrick K. McFarland, Esquire South Carolina Budget & Control Board Post Office Box 11608 Columbia, South Carolina 29211

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RlizaBeth A. Blitch, Paralegal McNair Law Firm, P.A.

Post Office Box 11390

Columbia, South Carolina 29211

(803) 753-3319

March 3, 2009

Columbia, South Carolina

BEFORE

THE PUBLIC SERVICE COMMISSION

OF

SOUTH CAROLINA

Docket No. 2000-366-A
(Year 2008-2009 Proceeding)

DIRECT TESTIMONY

OF

JAMES W. LATHAM

FOR

CHEM-NUCLEAR SYSTEMS, L.L.C.

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is James W. Latham. My business address is 740 Osborn Road, Barnwell, South Carolina. I am employed by Chem-Nuclear Systems, L.L.C. ("Chem-Nuclear"), a wholly-owned subsidiary of Duratek, Inc., which is, in turn, a wholly owned subsidiary of EnergySolutions, LLC. I am President of Chem-Nuclear and, concurrently, the Vice President for Barnwell Operations. As Vice President for Barnwell Operations, I am responsible for the safe and proper disposal of low-level radioactive waste received at the disposal facility in accordance with the company's South Carolina Radioactive Material License. I am also responsible for management, supervision and administration of disposal operations personnel, equipment and buildings. I am frequently a key point of contact between the company and local community leaders and members of the public. I have been in my current operations position in Barnwell since July 1996.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I graduated from the United States Naval Academy with a Bachelor of Science degree. I served in the United States Navy for twenty years in various assignments associated with nuclear powered submarines. I have worked for Chem-Nuclear since 1989. From 1989 to 1991, I was a project manager planning and directing field projects for Chem-Nuclear. I was assigned to Chem-Nuclear's new disposal site development office in Harrisburg, Pennsylvania, from 1991 to 1996. During my five years in the Pennsylvania Project Office, I held a number of positions including engineering director, deputy project manager, and acting project manager. I have been at Chem-Nuclear's disposal facility in Barnwell since July 1996, first as General Manager for Disposal Operations and then as Vice President for Barnwell Operations. I was assigned the concurrent position of Chem-Nuclear's President in August 2006.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE PUBLIC SERVICE COMMISSION?

A. I previously provided testimony at the Public Service Commission's proceedings regarding disposal site allowable costs in 2002, 2005, 2006, 2007, and 2008.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will provide information to the Commission about the disposal site and facility operations as those matters relate to disposal of low-level radioactive waste at the disposal facility located in Barnwell County, South Carolina. I will provide a brief background on the general process we have used in this proceeding for identifying the allowable costs associated with our low-level radioactive waste disposal business. I

have included an Amended Application for identification of allowable costs as an exhibit to my testimony. I will explain the differences between this Amended Application and the original application we submitted in September 2008. The Amended Application reflects the agreements we reached with the Office of Regulatory Staff ("ORS") during its audit of our allowable costs. Each year, ORS conducts a detailed audit of our accounting records. My testimony will also focus on the principal differences in categories of costs between costs we actually incurred in Fiscal Year 2007-2008 and the estimated costs identified in Commission Order 2008-447. We are seeking adjustments to the variable labor and non-labor costs, vault costs and irregular costs incurred in Fiscal Year 2007-2008. Finally, my testimony will summarize the costs we are requesting the Commission to identify as allowable for Fiscal Year 2008-2009.

Q. PLEASE DESCRIBE THE DISPOSAL SITE.

A. Chem-Nuclear operates a low-level radioactive waste disposal ("LLRW") facility located approximately five miles west of the City of Barnwell in Barnwell County, South Carolina. The closest municipality to the disposal site is the Town of Snelling. Chem-Nuclear has operated the disposal site since 1971 continuously with no interruptions or regulatory shutdowns. How we operate today has evolved over thirty-seven years. We are proud of what we have learned and we are proud of our safety record.

The disposal site comprises approximately 235 acres of property owned by the State of South Carolina and leased by Chem-Nuclear from the South Carolina Budget and Control Board. The 235-acre licensed disposal area is divided into different use categories including active trenches, completed trenches, potential trench areas, and ancillary facility, water management and buffer zone areas. Approximately 100 acres of multi-layer earthen

caps consisting of layers of compacted clay, bentonite, high-density polyethylene, sand, cover soils, top soils and shallow-rooted vegetation (grasses) have been installed on completed trenches.

The disposal site could not be operated successfully without an experienced and talented group of employees. They are critically important to the safe and compliant operation of the disposal site. Many of Chem-Nuclear' employees at the disposal site have been with the company for twenty years or more. Attracting and retaining high quality, well-motivated personnel is an integral part of successful, safe and regulatory compliant disposal of waste.

Q. PLEASE DESCRIBE THE DISPOSAL SITE OPERATIONS IN FISCAL YEAR 2008 – 2009 INCLUDING CHANGES FROM PREVIOUS YEARS' OPERATIONS.

A. Starting on July 1, 2008, the disposal site began accepting waste exclusively from generators in the three Atlantic Compact States. As part of the transition to this smaller disposal volume operation, the disposal site also embarked on a number of activities associated with Phase I decommissioning. Phase I decommissioning activities include installation of three phases of multi-layer earthen caps on completed trenches, demolition of three large buildings and two smaller structures located within the restricted area of the disposal site, and completion of performance objective verification studies and reports. The Phase I decommissioning activities are paid from the decommissioning trust fund and costs for these activities are not part of this proceeding. Some of the costs associated with maintenance, monitoring and control of those parts of the disposal site no longer used for active disposal of waste are also paid from the decommissioning trust fund.

- Q. PLEASE DESCRIBE BRIEFLY THE STATUTORY AND REGULATORY BACKGROUND FOR CHEM-NUCLEAR'S APPLICATION THAT IS THE SUBJECT OF THIS HEARING.
- A. This is the ninth hearing conducted by the Commission in this docket to fulfill its responsibilities under the Atlantic Interstate Low-level Radioactive Waste Compact Implementation Act of 2000. As required by the Act, the Commission has held formal proceedings annually and published orders after hearings in this docket by which the Commission has identified Chem-Nuclear's "allowable costs". By that determination, as provided by the Act, Chem-Nuclear is able to recover costs it incurs for operations in the disposal of LLRW at the Barnwell site.

Over the previous eight hearings, and as the Commission's orders demonstrate, the Commission has relied on the evidence to make numerous determinations with respect to which of our costs are to be properly considered as "allowable," and the Commission has consistently refined its decisions on the issues. As a consequence, many of the issues that the parties and the Commission addressed in previous proceedings have been resolved and the orders represent the precedents upon which we have relied in preparing our Application and evidence in this case.

Q. PLEASE EXPLAIN THE GENERAL CONCEPT THAT CHEM-NUCLEAR'S AMENDED APPLICATION AND EVIDENCE EMBODY IN THIS PROCEEDING.

A. Our Amended Application and our evidence in this case represent a similar approach to what was used in previous proceedings. That approach incorporates the separation of costs into the three categories that were identified in the Collaborative Review of Chem-Nuclear's Operations and Efficiency Plan that the Commission approved and which the Commission has directed Chem-Nuclear to use by previous orders in this Docket. Those

Application and evidence also reflect the full use of the accounting system the Commission previously approved. That accounting system enables us to capture and track the separated costs as we incur them and incorporate the data effectively in our internal monthly data reports and in our exhibits to the Application and our evidence.

The actual data collected in the three cost categories for Fiscal Year 2007-2008 provide information to adjust the projected costs the Commission identified as allowable in Commission Order 2008-447 to reflect actual operations experience. My testimony will identify the areas where we are seeking adjustments for Fiscal Year 2007-2008.

- Q. PLEASE EXPLAIN THE DIFFERENCES BETWEEN CHEM-NUCLEAR'S APPLICATION AND THE AMENDED APPLICATION PROVIDED AS AN EXHIBIT TO YOUR TESTIMONY.
- A. The principal differences between the original Application and the Amended Application were in fixed costs for Fiscal Year 2007-2008, and anticipated costs for Fiscal Year 2008-2009. The variable cost rates in our Amended Application for Fiscal Year 2008-2009 have also changed based on our experience during the first seven months of Fiscal Year 2008-2009.

Fixed Costs

Fixed Costs incurred in Fiscal Year 2007-2008 and identified in the Amended Application are \$214,452 less than the fixed costs in the original Application. This reduction is the result of a reduction in the amount of allowable General and Administrative ("G&A") costs. I will provide some detail about the allowable G&A costs later in my testimony.

Fiscal Year 2008-2009 Costs

Anticipated fixed costs for Fiscal Year 2008-2009 identified in the Amended Application are \$164,400 less than the fixed costs anticipated in the original application. This reduction is primarily the result of a reduction in labor, fringe and non-labor, and a reduction in insurance costs for Fiscal Year 2008-2009 offset somewhat by an increase in legal support costs.

Irregular costs in the Amended Application are the same as the irregular costs listed in the original Application for Fiscal Year 2008-2009.

The variable labor and non-labor rates anticipated for five categories of variable costs listed in the Amended Application vary from the variable labor and non-labor rates for those categories of costs based on our actual experience during the first seven months of Fiscal Year 2008-2009. Similarly, the variable material costs for vaults listed in the Amended Application are different from the variable material costs for vaults listed in the original application. This difference is also based on actual costs incurred during the first seven months of Fiscal Year 2008-2009.

- Q. PLEASE DESCRIBE THE MANNER IN WHICH CHEM-NUCLEAR TREATS

 "ALLOWABLE COSTS" UNDER THE REGULATORY PROCESS

 ESTABLISHED BY THE ACT?
- A. Chem-Nuclear's method for seeking adjustments to the costs identified by the Commission in its orders is different from the regulatory treatment of other regulated entities. First of all, the Act does not provide for the Commission to determine our revenue requirements, including rate of return, based on a test year, and fix our rates or charges to enable Chem-Nuclear to recover its revenue requirements. Under the Act, the Commission is not responsible to evaluate our revenue or to fix rates and charges. The Act empowers the

Commission to identify our "allowable costs," and we deduct this total (including a statutory margin applied on some costs) from the annual amount paid to the State.

At the end of each fiscal year, we compare the costs we actually incur to operate the site to the costs previously identified as allowable in the Commission's order for that year. We only use the actual costs incurred as the amount that we request the Commission to identify as allowable in the following proceeding. That means that if we do not actually spend as much as the Commission has allowed for a particular cost category, then we only use the actual amount spent in determining the allowable cost for Chem-Nuclear at the end of the year. If we were to spend more than the identified amount, we apply to the Commission to recover the extra cost in the subsequent fiscal year. Chem-Nuclear sometimes carries costs for a year or more until the Commission rules on our application to recover them.

Q. PLEASE EXPLAIN HOW THE PROCESS WORKS BY USE OF AN EXAMPLE?

A. Vault cost recovery is a good illustration of the method. Each year the Commission determines variable vault cost rates for standard disposal vaults that are dependent on the number of cubic feet of waste in four classifications received at the site (Class A, Class B, Class C, and Slit Trench waste). That variable vault cost rate can be used to forecast the vault costs in the next year, based on the volume of waste received in each category. However, it is difficult to predict accurately by waste classification the volume and mix of waste that will be received in any given year. Therefore, the variable vault cost rate will sometimes forecast a dollar amount for vault costs that is in excess of the actual amount spent. In such cases, the actual amount spent to procure concrete disposal vaults is used to determine Chem-Nuclear's cost recovery and fee, not the higher amount forecast by the variable vault cost rate. If, as it is this year, the situation were reversed, that is, if the vault

costs exceeded the level previously identified by the Commission, Chem-Nuclear would seek to recover the additional amount that we actually spent as part of the application for allowable cost recovery for the subsequent fiscal year in the next year's Commission proceeding.

Q. PLEASE EXPLAIN HOW THE ALLOWABLE PORTION OF CORPORATE GENERAL AND ADMINISTRATIVE (G&A) COSTS IS DETERMINED.

A. There are three components to the Corporate G&A Costs identified in our application. These components and their respective allocation methods are: Corporate SG&A (total cost basis), Corporate Information Systems (IS) allocation (based on a "head count" or the number of employees assigned to each business unit), and Columbia SG&A allocation (based on the number of disposal site personnel located in the company's Columbia, SC offices). The ORS again conducted a detailed audit of the pool of costs that formed the basis for Chem-Nuclear's G&A allocation to identify costs that were allowable and costs that were not allowable under the statute. We amended our Application following the audit to reflect the allowable G&A costs identified by the ORS.

Q. WHAT ALLOWABLE COSTS ARE INCLUDED IN G&A?

A. Corporate SG&A costs are allocated to each business unit on a total cost basis. The pool of costs that forms the basis for the Corporate SG&A allocation includes costs for Corporate Executive Management and Support, Contracts and Finance, Contracts Legal Support, Human Resources Corporate Support, Accounting Corporate Support, and Regulatory Affairs and Environmental, Safety, Health and Quality Assurance Corporate Support.

The Corporate IS costs are allocated based on the "head count" or number of employees assigned to each business unit. Columbia SG&A costs are allocated to business

units based on the number of each respective business unit's employees located in the company's Columbia, South Carolina, office. The total allowable Corporate G&A allocations for Fiscal Year 2007-2008 were \$1,246,765.

Q. PLEASE DESCRIBE THE ALLOWABLE COSTS INCURRED IN FISCAL YEAR 2007-2008 AND COMPARE THOSE COSTS TO THE AMOUNTS IDENTIFIED IN COMMISSION ORDER 2008-447.

A. This part of my testimony will focus on the principal differences in categories of costs between costs we actually incurred in Fiscal Year 2007-2008 and the costs identified in Commission Order 2008-447. The actual costs incurred in Fiscal Year 2007-2008 are also listed in our Amended Application which is provided as an exhibit to my testimony. We are requesting adjustment to the variable labor and non-labor costs, variable vault costs and the irregular costs incurred in Fiscal Year 2007-2008.

Fixed Costs

Actual fixed costs incurred in Fiscal Year 2007-2008 were \$491,150 less than the fixed costs identified in Commission Order 2008-447. The primary reasons the actual fixed costs were less than the amount in the Order are lower labor and fringe costs, lower insurance costs, and lower depreciation costs. Total fixed costs in Fiscal Year 2007-2008 were \$7,452,850. Chem-Nuclear is not requesting an adjustment in this category of cost.

Variable Material (Vault) Costs

The amount of actual variable costs incurred in Fiscal Year 2007-2008 for standard disposal vaults were \$198,334 more than the amount calculated using rates identified in Commission Order 2008-447.

Costs incurred each year for standard concrete disposal vaults are affected by a number of factors including the size and shape of waste packages received and the number

and type of vaults used for routine waste disposal. Each year, variable material cost rates (in dollars per cubic foot) for concrete disposal vaults have been developed for Class A waste, Class B waste, Class C waste, and slit trench waste. The rates developed can then be used as one predictor of the cost of vaults for the following year based on the various volumes of waste received in each waste classification and slit trench waste volumes; however, actual costs for the disposal vaults are known and measurable at the conclusion of the year. Actual costs of \$1,975,945 were incurred for concrete disposal vaults used for routine shipments of radioactive waste in Fiscal Year 2007-2008.

Q. PLEASE EXPLAIN WHY AVERAGE VAULT LOADING ALONE MAY NOT BE A GOOD PREDICTOR OF VAULT COSTS.

A. Vault loading in each of the three standard concrete disposal vaults (rectangular vaults, cylindrical vaults, and slit trench vaults) may be a general indicator of vault disposal efficiency, but other factors related to the characteristics of the waste packages received tend to have a stronger affect on the determination of vault costs per unit volume of waste. As previously mentioned, the size and shape of waste packages received affect vault loading. The package dose rates, disposal site license requirements to segregate stable and unstable wastes, handling precautions to maintain waste package integrity, and overall waste classification also affect how the vaults are loaded. We do, however, examine average vault loading each year. From time to time, certain radioactively contaminated materials used at the disposal site for personnel protection and to control the potential spread of radioactive contamination must be disposed of in concrete disposal vaults. When possible, we try to utilize space around other billable waste packages in the vault; however, disposal of this site-generated waste may also reduce the amount of billable waste loaded into some of the vaults.

Q. PLEASE EXPLAIN THE DIFFERENCES IN SLIT TRENCH OPERATIONS IN FISCAL YEAR 2007-2008 COMPARED TO PREVIOUS YEARS.

A. In order to meet customer demand for disposal of waste that required slit trench offload, seventy-three slit trench shipments were buried during Fiscal Year 2007-2008. Fifteen of the slit trench shipments in Fiscal Year 2007-2008 were in the FSV cask. In recent years prior to Fiscal Year 2007-2008, all slit trench shipments arrived at the disposal site in either a 3-55 cask or the TN-RAM cask. The slit trench offload equipment arrangement for the TN-RAM and the 3-55 casks is very similar, but use of the FSV cask requires rearrangements of several pieces of equipment and additional labor to support each offload. Then the equipment has to be returned to its previous arrangement to support the 3-55 cask or TN-RAM cask offloads. The waste package inside an FSV cask is also smaller than the waste package inside a 3-55 cask or a TN-RAM cask. The introduction of the FSV cask shipments into the mix of waste received for slit trench offloads reduced the average waste volume per slit trench vault to about 51.5 cubic feet per vault compared to prior years' average volume of about 57.5 cubic feet per vault.

Q. PLEASE CONTINUE WITH YOUR EXPLANATION OF ALLOWABLE COSTS INCURRED IN FISCAL YEAR 2007-2008

A. I will continue with the variable labor and non-labor costs.

Variable Labor and Non-Labor Costs

In addition to the variable costs associated with disposal vaults, Commission Order No. 2008-447 identifies variable cost rates associated with five categories of activities: disposal vault purchase, inspection and placement; handling of Class A, Class B and Class C waste shipments; slit trench offload operations; waste acceptance; and waste shipment scheduling and disposal records maintenance. Each of these rates is associated with an

independent variable (number of vaults, number of shipments buried, number of slit trench offloads, or number of waste containers buried). The variable labor and non-labor rates identified in Commission Order No. 2008-447 predicted variable labor and non-labor costs within about 9% of the actual variable labor and non-labor costs incurred. Actual costs of \$1,195,903 were incurred for variable labor and non-labor expenses in Fiscal Year 2007-2008. This amount is \$107,849 more than the amount calculated using the rates identified in Commission Order No 2008-447.

Actual variable labor and non-labor rates can be calculated in each of the five categories by dividing the actual costs in each respective category by appropriate independent variable for the year. Three actual variable labor and non-labor rates for Fiscal Year 2007-2008 are higher than the rates identified in Commission Order 2008-447 and two actual rates are lower.

Irregular Costs

Not all irregular costs for the year are known at the time a Commission order is issued. Irregular costs are costs incurred for projects that may not occur each year or costs for projects that occur each year but with varying costs. Each year irregular cost projects with varying costs include trench construction, site engineering and drawing updates, and other site construction projects. Examples of projects that may not recur each year are irregular component disposal, site assessments and license renewal proceedings and hearings. Total irregular costs incurred for Fiscal Year 2007-2008 were \$329,843 more than the total irregular cost amount identified in Commission Order 2008-447. We are, therefore, requesting the Commission to identify the amount of \$644,843 as allowable.

Actual Irregular Costs Detailed by Projects

Actual costs for design, construction, and backfilling various trenches were \$285,897. Trenches included in this amount for Fiscal Year 2007-2008 were all or parts of: Trench

86, Trench 97, Trench 98 and Slit Trenches 31, 32, 33, 34, 35 and 36. Costs for all of these trenches were not included in the Order. The large number of slit trenches reflects a high level of activity in slit trench offloads as well as an effort to fully utilize areas of the site bounded by previously constructed trenches.

Chem-Nuclear labor and related costs associated with the disposal site license renewal and the subsequent appeal were on-going at the time of last year's proceedings. The actual costs incurred for these irregular project tasks in Fiscal Year 2007-2008 were \$5,381.

Costs incurred for decontamination and corrective actions were \$70,682. These costs included costs related to decontamination efforts and corrective actions required as a result of waste received for disposal. Also included were costs for replacement rigging equipment required to replace worn and damaged equipment used in waste offloads.

Site engineering and drawing updates include: Site engineering support and preparation and reproduction of site drawings; and design package updates for slit trenches.

The actual costs of \$24,516 were less than the amount included in the Order.

Costs for various site assessments totaled \$156,440. These costs included costs associated with special projects related to disposal site performance as directed by South Carolina Department of Health and Environmental Control (DHEC). During Fiscal Year 2007-2008, DHEC directed sampling of private drinking water wells in the vicinity of the disposal site for radioactivity. Although the additional samples of over 80 water sources showed no impact from disposal site operations, this non-routine work was necessary to address concerns raised among members of the public by certain news media reports. Also included at the direction of DHEC were costs for providing requested data records and analyses including an historical compilation of borehole and well records.

Costs associated with preparation for potential disposal of items that involve unusual handling requirements and Registered Land Surveyor activities were \$3,292. The labor costs in this project are indicated as a credit (or negative cost) because of a true-up of fringe costs for the year.

Other irregular costs include costs for special waste tracking requests from customers and regulatory agencies, special projects related to site technical performance as directed by DHEC, and costs for concrete disposal vaults for certain site generated wastes including blocking and bracing from shipments received when space was not available in other disposal vaults. Actual costs incurred for these activities were \$68,147.

Costs for various environmental monitoring well abandonment activities were not included in the basis for the Order. From time to time, DHEC approves the abandonment of certain environmental monitoring wells. Actual costs for abandonment of three environmental monitoring wells in accordance with DHEC regulations were \$4,293.

Costs for non-routine activities as directed by DHEC for planning appropriate environmental measurements in and around Mary's Branch Creek were \$24,383.

Costs associated with personnel and additional physical security enhancements related to radioactive materials at the disposal site and as directed by DHEC were not known at the time of last year's proceedings. The actual costs for these activities in Fiscal Year 2007-2008 were \$1,812. Labor costs in this project are shown as a credit because of a true-up of fringe costs for the year.

Q. PLEASE DESCRIBE THE COSTS PROPOSED FOR FISCAL YEAR 2008–2009.

A. The costs proposed for Fiscal Year 2008-2009 are summarized in Amended Exhibit C.

Disposal operations in Fiscal Year 2008-2009 will reflect smaller volume disposal site

operations because the disposal site will only accept waste from the three Atlantic Compact states.

Most of these costs are conservative estimates developed from the actual costs experienced in prior years or based on an extrapolation of our experience during the first seven months of Fiscal Year 2008 -2009 (July 2008 through January 2009).

Proposed Fixed Costs

The fixed labor costs (labor and fringe costs) proposed for Fiscal Year 2008-2009 and non-labor fixed costs proposed are based on actual fixed labor costs incurred in Fiscal Year 2007-2008 with appropriate "scale down" factors applied to various fixed cost projects. Insurance costs proposed for Fiscal Year 2008-2009 are based on anticipated insurance premium costs for the year. A reduction from premium amounts paid in Fiscal Year 2007-2008 results from completion of premiums paid during the preceding eight years on a special 10-year pollution liability policy that expires in 2010.

Legal expenses are anticipated to be continuing because of the license renewal appeal process and other legal matters.

Total fixed costs proposed for Fiscal Year 2008-2009 are \$2,561,000.

Proposed Irregular Costs

As discussed earlier, not all irregular costs were known at the time the application was submitted. The irregular costs identified in Amended Exhibit C are based on costs incurred during the first half of Fiscal Year 2008-2009 and a modest level of activities expected in the second half of the Fiscal Year. During Fiscal Year 2008-2009, we will reduce the number of employees involved with disposal operations. A few of these employees may be reassigned to other business units within the company and others will be eligible for severance pay in accordance with Chem-Nuclear's existing policy. A total of \$389,000 in

various irregular project costs is summarized in Amended Exhibit C to our Amended Application.

Proposed Variable Labor and Non-Labor Cost Rates

Rates for variable labor and non-labor costs are developed from actual project costs divided by units of an appropriate independent variable parameter such as the number of vaults, the number of shipments, the number of slit trench offloads, etc. These "actual cost" variable rates can then be projected ahead.

The variable labor and non-labor cost rates for the first seven months of Fiscal Year 2008-2009 are based on actual costs incurred in each of the five variable projects during the seven months from July 2008 through January 2009. The independent variable parameter used to determine the variable cost rates in each of the variable projects are the same parameters used since 2003 in proceedings in this matter. Each of the variable cost projects is considered separately based on the different independent variable parameters. The number of units of independent variable used in each project will vary from year to year generally proportional (but not in a linear relationship) with the amount of waste received. The variable cost rates developed from the first seven months of Fiscal Year 2008-2009 are shown in our Amended Exhibit C as the proposed variable labor and non-labor costs for Fiscal Year 2008-2009.

Proposed Variable Material (Vault) Cost Rates

Rates for concrete disposal vaults are calculated based on the volume of each waste classification disposed and the cost of vaults used for disposal of that waste. The actual volume of waste in each type of disposal vault, of course, depends on a number of other factors including the size, shape and material composition of waste packages received, dose rates measured on the waste packages received, and the mix of waste received between the

various waste classifications. The variable cost rate for concrete disposal vaults is expressed in dollars per cubic foot of each major classification of waste (Class A, Class B, Class C, and Slit Trench waste).

Amended Exhibit C provides variable cost rates for concrete disposal vaults expressed in dollars per cubic foot of each major classification of waste (Class A, Class B, Class C, and Slit Trench waste). The rates provided in Amended Exhibit C are based on actual costs incurred during the first seven months of Fiscal Year 2008-2009 (July 2008 through January 2009).

- Q. PLEASE EXPLAIN DIFFERENCES IN SLIT TRENCH OPERATIONS IN FISCAL
 YEAR 2008-2009 COMPARED TO PREVIOUS YEARS AND HOW THAT
 AFFECTS THE ANTICIPATED VARIABLE COST RATE FOR VAULTS.
- A. In prior years, only horizontally off-loaded casks (3-55, TN-RAM or FSV) had been offloaded at the slit trench. In July 2008, three horizontally offloaded casks were offloaded at Slit Trench 36. Based on subsequent conversations with Atlantic Compact waste generators, we determined that there would likely be no additional horizontally offloaded casks for slit trench offloads for the remainder of Fiscal Year 2008-2009.

The introduction of the FSV cask into the mix of casks used to deliver horizontal offload (slit trench) waste to the disposal site impacted the slit trench vault variable rate in Fiscal Year 2007–2008 and in the first seven months of Fiscal Year 2008-2009. During July 2008, we disposed of three slit trench shipments, one of which was an FSV shipment. That reduced the average waste volume per slit trench vault to about 42.27 cubic feet per vault. This lower average vault volume increases the slit trench variable rate per cubic foot for vault costs. The dose rates and radioactive material activity levels involved in the slit

trench operation require placement of only one liner (radioactive waste package) per vault. The anticipated variable cost rate for slit trench vaults is shown in Amended Exhibit C.

One of the challenges with operating a low waste volume disposal site is managing the amount of open trench space and the rainwater that open trench space may accumulate. In order to meet this objective of open trench space management and with concurrence from DHEC, we placed two cylindrical vaults in Slit Trench 36 and offloaded two shipments from vertical offload casks in November 2008. These two cylindrical vaults are part of the calculation of Variable Cost Rate for vaults for Class B and Class C waste shown on Amended Exhibit C. After filling the two cylindrical vaults, Trench 36 was backfilled and

Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes it does.

closed.